Application No.: Amendment Dated: Reply to Office Action of: 09/470,667 August 11, 2003 March 10, 2003

REMARKS

The undersigned attorney wishes to thank the Examiner for the courtesies extended during the Interview. Amendments to claims 30-32, which the Examiner indicated would overcome the rejections of record and claims 37 and 38 were discussed at the Interview. According, we present herein the amendments and additional claims discussed at the Interview.

Claim 32 has been cancelled, without prejudice.

For the sake of consistency, claims 13-16 and 36 have been amended to replace the terms "recombinant organism" and "organism" with --host cell--. Support for this amendment is found in the specification at, for example, page 12, lines 13-19. This amendment is formal in nature and does not narrow the scope of the claims in any manner.

As requested by the Examiner, claims 30 and 31 have been amended to replace the term "comprising" with --consisting of--. Support for this amendment is found in Figure 4, as originally filed, and in the specification at, for example, page 58, line 21 to page 60, line 23.

For the sake of clarity, claims 30 and 31 have further been amended to remove the recitation of "a polypeptide fragment consisting of." This amendment is formal in nature and does not narrow the scope of the claims in any manner.

Claim 34 has been amended for the sake of clarity to insert the term --any-- before "one." This amendment is formal in nature and does not narrow the scope of the claim in any manner.

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Claim 34 has further been amended to remove its dependence from claim

32, which has been cancelled without prejudice, and to depend from claims 37 and 38.

Support for this amendment is found in the specification at, for example, page 57, line

14 to page 58, line 5 and page 58, line 21 to page 59, line 19.

Claims 37 and 38 have been added. Support for these claims is found in

Figure 4, as originally filed, and in the specification at, for example, page 58, line 21 to

page 60, line 23.

It is submitted that no new matter has been introduced by the foregoing

amendments. Approval and entry of the amendments is respectfully solicited.

§101 Rejections

Claims 16 and 36 were rejected under 35 U.S.C. § 101. (Paper No. 20 at

7). In making the rejection, the Examiner asserted that "[t]he claims are directed to any

recombinant organism, including human recombinant organism. Therefore, the claims

are directed to non-statutory subject matter." (Id.).

With a view towards furthering prosecution, claims 16 and 36 have been

amended to replace the recitation of "recombinant organism" with --host cell--. It is

respectfully submitted that claims 16 and 36, as amended, are directed to statutory

subject matter. Accordingly, the rejection is rendered moot and should be withdrawn.

§ 112, Second Paragraph Rejections

Claims 13-15, 32 and 36 were rejected under 35 U.S.C. § 112, second

paragraph. (Paper No. 20 at 4 and 7). In making the rejection, the Examiner asserted

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that claims 13-15, 32 and 36 recite the limitation "a recombinant organism" for which "there is insufficient antecedent basis" because the claims from which they depend are not directed to a "recombinant organism." (*Id.*).

Initially, we note that claim 32 does not recite "a recombinant organism." Accordingly, we are assuming that the rejection of this claim was issued in error. Notwithstanding the foregoing, claim 32 has been cancelled. Thus, all rejections of claim 32 have been rendered moot and should be withdrawn.

With a view towards furthering prosecution, claims 13-15 and 36 have been amended to replace the recitation of "recombinant organism" with --host cell--. There is antecedent basis for "host cell" in the claims from which claims 13-15 and 36 depend (*i.e.*, claims 10 and 11). Accordingly, the rejection is rendered moot and should be withdrawn.

§ 112, First Paragraph Rejections

1. Written Description

Claims 30 and 31 were rejected under 35 U.S.C. § 112, first paragraph. (Paper No. 20 at 4-5). In making the rejection, the Examiner asserted that:

[t]he function of fragments consisting of 1-95/1-135 amino acid residues of SEQ ID NO: 5 is to be used in a hybrid enzymes [sic] and the function of polynucleotide sequences encoding the fragments consisting of residues 1-95 and 1-[1]35 is to be used in hybrid genes encoding said hybrid enzymes. However, the function of other species of the claimed genus, *i.e.*, any isolated polynucleotide *comprising* a polynucleotide sequence encoding a polypeptide fragment consisting of amino acid residues 1-95 or 1-[1]35 of SEQ ID NO: 5 is not recited by the claims or set forth in the specification. (*Id.*) (emphasis added).

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With a view towards furthering prosecution and as requested by the Examiner during the Interview, claims 30 and 31 have been amended to replace the recitation of "comprising" with --consisting of--. In accordance with the agreement reached with the Examiner during the Interview, it is respectfully submitted that the rejection is rendered moot and should be withdrawn.

Claim 32 was rejected under 35 U.S.C. § 112, first paragraph. (Paper No. 20 at 8-9). In making the rejection, the Examiner asserted that:

[t]he specification discloses only a few species of the claimed genus, *i.e.*, that of SEQ ID NO: 1 encoding SEQ ID NO: 5 and chimera species explicitly described on page 59, line 6 and further. This is, however, insufficient to put one of skill in the art in possession of the attributes and features of all species within the claimed genus.

With a view towards furthering prosecution, claim 32 has been cancelled, without prejudice. Accordingly, the rejection is rendered moot and should be withdrawn.

2. Enablement

Claims 30 and 31 were rejected under 35 U.S.C. § 112, first paragraph. (Paper No. 20 at 5). In making the rejection, the Examiner asserted that:

...the specification, while being enabling for the DNA molecule of SEQ ID NO: 1 encoding SEQ ID NO: 5 having the AADH activity, or for some DNA molecules encoding hybrid enzymes having AADH activity ... does not reasonably provide enablement for any polynucleotide *comprising* an nucleotide sequence [sic] encoding polypeptides consisting of 1-95 or 1-135 of SEQ ID NO: 5. (*Id.* at 5-6).

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With a view towards furthering prosecution and as requested by the Examiner during the Interview, claims 30 and 31 have been amended to replace the recitation of "comprising" with --consisting of--. In accordance with the agreement reached with the Examiner during the Interview, it is respectfully submitted that the rejection is rendered moot and should be withdrawn.

Claim 32 was rejected under 35 U.S.C. § 112, first paragraph. (Paper No. 20 at 10). In making the rejection, the Examiner asserted that:

...the specification, while being enabling for the DNA molecule of SEQ ID NO: 1 encoding SEQ ID NO: 5, or chimeras characterized structurally on page 59 of the specification, having the AADH activity, does not reasonably provide enablement for [the DNA of claim 32]....

With a view towards furthering prosecution, claim 32 has been cancelled, without prejudice. Accordingly, the rejection is rendered moot and should be withdrawn.

Favorable action on the merits, including entry of the amendments, withdrawal of the rejections, and allowance of all the claims, respectfully, is requested. If the Examiner has any questions regarding this paper, please contact the undersigned attorney.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450, on August 11, 2003.

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Respectfully submitted.

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